

Claims:

Please cancel claims 5 and 14 without prejudice.

1. (currently amended) A method for facilitating operations related to data storage between a first device and at least one data storage unit in a computer network, comprising the steps of:

duplicating selected metadata from the at least one data storage unit to the first device,  
wherein the selected metadata describes a location of data stored on the data storage unit;

causing generation of a storage services protocol transaction to access the data stored on  
the data storage unit and described by the selected metadata, wherein the generation is responsive  
to the selected metadata duplicated to the first device;

encapsulating the storage services protocol transaction into a payload portion of at least one network protocol data unit;

processing the at least one network protocol data unit based on a storage services protocol set to facilitate transmission of the at least one network protocol data unit to the at least one data storage unit, wherein the processing is performed at a switch located in the computer network;

extracting the storage services protocol transaction from the at least one network protocol data unit; and

operating upon the storage services protocol transaction.

2. (original) The method of claim 1 wherein said processing step includes the further step of balancing loads associated with selected read transactions.

3. (original) The method of claim 1 wherein said processing step includes the further step of duplicating data units associated with selected write transactions to achieve mirroring.

4. (original) The method of claim 1 wherein said processing step includes the further step of duplicating data units associated with selected transactions to achieve N-way mirroring.

5. (cancelled)

6. (original) The method of claim 1 wherein said processing step includes the further step of ensuring right to access based on originator.

7. (original) The method of claim 1 wherein said processing step includes the further step of blocking access to selected destinations.

8. (original) The method of claim 1 wherein said processing step includes the further step of monitoring and logging access.

9. (original) The method of claim 8 wherein said processing step includes the further step of employing results from access monitoring and logging to detect unauthorized intrusion.

10. (currently amended) Apparatus that facilitates operations related to data storage between a first device and at least one data storage unit in a computer network, comprising:

a file system that indicates location of data stored on at least one data storage unit;~~and~~  
circuitry that duplicates selected metadata from the at least one data storage unit to the first device, wherein the selected metadata describes the location of the data stored on the at least one data storage unit;

~~circuitry within a switch in the computer network~~ that processes at least one network protocol data units associated with the operations based on storage services protocol set information to facilitate transmission of the network protocol data units to the at least one data storage unit, wherein said processing of the network protocol data units includes encapsulating a storage services protocol transaction into a payload portion of each of the network protocol data units, wherein the storage services protocol transaction is to access the data stored on the data

storage unit and described by the selected metadata, and wherein the storage services protocol transaction is generated in response to the selected metadata duplicated to the first device.

11. (original) The apparatus of claim 10 wherein said circuitry balances loads associated with selected read transactions.

12. (original) The apparatus of claim 10 wherein said circuitry duplicates data units associated with selected write transactions to achieve mirroring.

13. (original) The apparatus of claim 10 wherein said circuitry duplicates data units associated with selected transactions to achieve N-way mirroring.

14. (cancelled)

15. (original) The apparatus of claim 10 wherein said circuitry facilitates ensuring right to access based on originator.

16. (original) The apparatus of claim 10 wherein said circuitry blocks access to selected destinations.

17. (original) The apparatus of claim 10 wherein said circuitry monitors and logs access.

18. (original) The apparatus of claim 17 wherein said circuitry employs results from access monitoring and logging to detect unauthorized intrusion.

19. (cancelled)

20. (cancelled)

21. (cancelled)

22. (cancelled)

23. (cancelled)

24. (cancelled)

25. (cancelled)

26. (cancelled)

27. (cancelled)

28. (cancelled)

29. (cancelled)

30. (cancelled)

31. (cancelled)